



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,890	03/01/2005	Hanns-Peter Klockner	RBL0119	5310
832 7590 07/17/2007 BAKER & DANIELS LLP 111 E. WAYNE STREET SUITE 800 FORT WAYNE, IN 46802			EXAMINER IQBAL, KHAWAR	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 07/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,890	Applicant(s) KLOCKNER, HANNIS-PETER	
	Examiner Khawar Iqbal	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5-25-05 has been entered.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 12 recites the limitation "from the short memory center SMSC" in page 3, line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "from the short memory center SMSC" in page 4, line 20. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10,12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jean Henry-Labordere (20030013464) and further in view of Frangion et al (20030229534) and Robinson et al (6760580).

5. Regarding claim 12 Jean Henry-Labordere teaches a system to handle short messages under phone number portability between multiple telecommunications networks, where the phone numbers do not permit an unambiguous linkage of the user to a specific telecommunication network and where several attempts at delivery of the short messages are possible, and where the parameters or data required for delivery of the short message are determined during the first attempt at delivery, said system comprising (figs. 1-3, para. # 0029):

means for determining parameters or data required for the delivery of a short message from a sending entity to a recipient by determining the relevant home register HLR for the recipient and then generating a routing inquiry to the relevant HLR (para. 0001-0008,0018, 0021-0034);

the relevant HLR including means for responding to the inquiry by returning parameters or data for delivery (para. 0001-0008, 0021-0034);

means for performing a first attempt at delivery based on the parameters or data required for delivery (para. 0001-0008, 0021-0034);

means for temporarily storing in a short message service center SMSC in the sending network that is involved in the transaction the short message to be delivered and the parameters or data required for delivery including the HLR address of the

Art Unit: 2617

relevant home register HLR containing the required parameters or data obtained during the first attempt at delivery (para. 0001-0008,0018, 0021-0034);

storage space reserved to store all or part of the parameters or data relating to the first attempt at delivery in a short message service center (SMSC) involved in the transaction, where such storage space is associated with a temporary storage location housing the short message to be delivered, and where the stored parameters or data required for delivery are stored for use at least in part in subsequent attempts at delivery (para. 0001-0008, 0021-0034). Jean Henry-Labordere teaches sending short SMS messages to mobile networks having number portability within the same country that a computer with SS7 connections is used as an SMSC relay to relay the short messages sent by an operator A to a subscriber of a network B visiting another network C, the latter having no roaming agreement with network A, by sending the short SMS message with the global title GT of the visited MSC to a companion SMSC in a network which does have a roaming agreement with network C, the computer capable of interrogating all the HLRs of the country in which the number portability is operated, the computer having a cache memory for all the mobile subscribers of the country in which the portability is operated so that the computer will know which HLR to interrogate, without searching, once the HLR has been found a first time. The invention may consist of a "Conversion Unit" installed at each operator, which wants to have the MNP feature to send SMS to all his subscribers (regular or port-in) or to the others. The Conversion Unit is basically the same as the MNP-MSC but does not require a large cache memory. Send a Forward Short Message Mobile Terminated (SMSMT) to the visited MSC which

Art Unit: 2617

will relay to the Destination Address handset. In case of failure, various classical retry schemes may be used. Jean Henry-Labordere does not specifically teach means for erasing from the short memory service center SMSC the short message and said parameters or data required for delivery when the short message is delivered successfully.

In an analogous art, Frangione et al teaches (sport to Jean Henry-Labordere teaches para. # 0018 and see Background of the Invention) if the short message was not delivered successfully, performing at least a subsequent attempt at delivery by retrieving the message and store in the SMSC (para. # 0116-0118). Applicant acknowledges (Background of the Invention), "This is handled by various procedures that vary in complexity, but that will eventually yield the needed information, such that it is available after all. The sending entity, which is the HLR in the subscription network of the recipient, also sends his calling party address (CgPty address) as the sender's address. However, this is deleted after each delivery attempt of the SM in all currently known procedures. Thus, the SMSC must address the intended HLR again via a so-called MNP-SRF network element for each subsequent retry, even in those cases where the HLR is in the own PLMN. This procedure has been used to-date prior to MNP and continues to be used after MNP essentially unchanged, which leads to the inefficiency described above" (see para. # 3, Background of the Invention). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Jean Henry-Labordere by specifically adding feature if the short message was not delivered

Art Unit: 2617

successfully, performing at least a subsequent attempt at delivery by retrieving the message and store in the SMSC in order to enhance control the delivering procedure to save the memory space as taught by Frangione et al. Jean Henry-Labordere and Frangione et al do not specifically teach if the short message is delivered successfully, erasing the short message.

In an analogous art, Robinson et al teaches if the short message is delivered successfully, erasing the short message (col. 8, lines 7-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Jean Henry-Labordere and Frangione et al and Applicant acknowledges (Background of the Invention) by specifically adding feature if the short message is delivered successfully and erasing the short message in order to enhance control the delivering procedure to save the memory space as taught by Robinson et al.

Regarding claims 13,14 Jean Henry-Labordere teaches method for handling short messages under phone number portability between several communications networks, where the phone numbers do not permit an unambiguous linkage of the user to a specific telecommunication network, comprising the steps of (figs. 1-3):

determining parameters or data required for the delivery of a short message from a sending entity to a recipient by determining the relevant home register HLR for the recipient and then generating a routing inquiry to the relevant HLR (para. 0001-0008, 0021-0034);

the relevant HLR responding to the inquiry by returning parameters or data for delivery (para. 0001-0008, 0021-0034);

performing a first attempt at delivery based on the parameters or data required for delivery (para. 0001-0008, 0021-0034);

temporarily storing in the short message service center SMSC involved in the transaction the short message to be delivered and the parameters or data required for delivery including the HLR address of the relevant home register HLR containing the required parameters or data obtained during the first attempt at delivery (para. 0001-0008, 0021-0034). Jean Henry-Labordere teaches sending short SMS messages to mobile networks having number portability within the same country that a computer with SS7 connections is used as an SMSC relay to relay the short messages sent by an operator A to a subscriber of a network B visiting another network C, the latter having no roaming agreement with network A, by sending the short SMS message with the global title GT of the visited MSC to a companion SMSC in a network which does have a roaming agreement with network C, the computer capable of interrogating all the HLRs of the country in which the number portability is operated, the computer having a cache memory for all the mobile subscribers of the country in which the portability is operated so that the computer will know which HLR to interrogate, without searching, once the HLR has been found a first time. The invention may consist of a "Conversion Unit" installed at each operator, which wants to have the MNP feature to send SMS to all his subscribers (regular or port-in) or to the others. The Conversion Unit is basically the A-me as the MNP-MSC but does not require a large cache memory. Send a

Forward Short Message Mobile Terminated (SMSMT) to the visited MSC which will relay to the Destination Address handset. In case of failure, various classical retry schemes may be used. Jean Henry-Labordere does not specifically teach means for erasing from the short memory service center SMSC the short message and said parameters or data required for delivery when the short message is delivered successfully.

In an analogous art, Frangione et al teaches (sport to Jean Henry-Labordere teaches para. # 0018 and see Background of the Invention) if the short message was not delivered successfully, performing at least a subsequent attempt at delivery by retrieving the message and store in the SMSC (para. # 0116-0118). Applicant acknowledges (Background of the Invention), "This is handled by various procedures that vary in complexity, but that will eventually yield the needed information, such that it is available after all. The sending entity, which is the HLR in the subscription network of the recipient, also sends his calling party address (CgPty address) as the sender's address. However, this is deleted after each delivery attempt of the SM in all currently known procedures. Thus, the SMSC must address the intended HLR again via a so-called MNP-SRF network element for each subsequent retry, even in those cases where the HLR is in the own PLMN. This procedure has been used to-date prior to MNP and continues to be used after MNP essentially unchanged, which leads to the inefficiency described above" (see para. # 3, Background of the Invention). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Jean Henry-

Art Unit: 2617

Labordere by specifically adding feature if the short message was not delivered successfully, performing at least a subsequent attempt at delivery by retrieving the message and store in the SMSC in order to enhance control the delivering procedure to save the memory space as taught by Frangione et al. Jean Henry-Labordere and Frangione et al do not specifically teach if the short message is delivered successfully, erasing the short message.

In an analogous art, Robinson et al teaches if the short message is delivered successfully, erasing the short message (col. 8, lines 7-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Jean Henry-Labordere and Frangione et al and (Applicant acknowledges (Background of the Invention)) by specifically adding feature if the short message is delivered successfully and erasing the short message in order to enhance control the delivering procedure to save the memory space as taught by Robinson et al.

Regarding claim 10 Jean Henry-Labordere teaches characterized by having the query of HLR use an SS7 channel (para. 0013, 0021-0034).

Response to Arguments

6. Applicant's arguments with respect to claims 10,12-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khawar Iqbal whose telephone number is 571-272-7909.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Khawar Iqbal


GEORGE ENG
SUPERVISORY PATENT EXAMINER